## **ABSTRACT**

A transition circuit includes: a waveguide having a notched portion formed by cutting away a portion of the tube wall of the waveguide from the end portion of the waveguide; a dielectric substrate in which a portion extending outside the waveguide through the notched portion of the waveguide is formed; a plurality of polygonal conductor patterns formed regularly disposed on the dielectric substrate; a ground conductor formed on the dielectric substrate; through holes electrically connecting this ground conductor and each of the conductor patterns; an open stub formed on the dielectric substrate; and the conductor of a microwave transmission line, which is formed on the portion of the dielectric substrate, extending outside the waveguide, and which is electrically connected to the open stub.